Appendix B

Comments on the Draft Environmental Impact Statement

This appendix presents all of the comments received during the Millennium Bulk Terminals— Longview Draft Environmental Impact Statement comment period. Comments are presented by the following commenter type categories.

- Federal Agencies
- State Agencies
- Local and Regional Agencies
- Elected Officials
- Tribes and Tribal Representation
- Organizations
- General Public
- Mass-Mail Campaigns

Each section includes a list¹ of the comments presented in the category. The list includes commenter name and the unique comment identifier used in the responses to comments in Chapters 2 through 7 of this volume. Commenter name and identifier are also included at the top of each comment.

¹ Because of the volume of form letters received, a representative sample of each form letter type is presented followed by an index of the names of every commenter who submitted the form letter.

Federal Agencies

Table B-1. Federal Agencies

Submission Number	Commenter Name
3306	U.S. Environmental Protection Agency
3458	U.S. Fish and Wildlife Service-Washington Office
2501	U.S. Forest Service
2432	U.S. National Park Service



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY REGION 10

1200 Sixth Avenue, Suite 900 Seattle, WA 98101-3140

OFFICE OF ENVIRONMENTAL REVIEW AND ASSESSMENT

June 13, 2016

Sally Toteff, Southwest Regional Office Director Millennium Bulk Terminals EIS, c/o ICF International 710 Second Avenue, Suite 550 Seattle, Washington 98104

Dear Ms. Toteff:

In response to your invitation, the U.S. Environmental Protection Agency has reviewed the April 2016 State Environmental Policy Act Draft Environmental Impact Statement (State DEIS) for the Millennium Bulk Terminals-Longview project. Thank you for the opportunity to provide comments.

We appreciate the State's decision in the State DEIS to consider impacts outside of the terminal's immediate area. We agree that this broader scope is appropriate for a thorough environmental review. It is also responsive to concerns expressed by many agencies and individuals about impacts to human health and the environment along the transportation routes to the terminal and the potential for effects in the United States from combustion of exported coal. The State's analysis finds that there are serious, projected impacts within that broader scope of analysis, further supporting the importance and significance of including a broader scope as part of a reasonable environmental review.

Air Quality

The State DEIS's air quality modeling for the Proposed Action's related activities at and near the terminal show substantial, predicted increases in pollution concentrations for some criteria air pollutants. For PM10, the State's analysis shows that the amount of degradation from the Proposed Action would exceed an allowable amount under the Clean Air Act's requirements for Prevention of Significant Deterioration (24-hour modeled impact of 85 ug/m³, which exceeds the Class II 24-hour PSD increment of 30 ug/m³). For PM2.5, the Proposed Action would have an impact of 12 ug/m³, which is greater than the Class II 24-hour PSD increment of 9 ug/m³. Consequently, we recommend further evaluation of air quality impacts.

The State DEIS does not take a similar look at air quality impacts outside of the project area. The State DEIS does not include modeling, similar to the modeling that was done near the terminal, for at-risk communities across the state and instead compares locomotive and vessel emissions near the terminal to statewide locomotive and vessel emissions. This information is not sufficient to conclude that the locomotive or vessel emissions from the Proposed Action would not result in meaningful pollution or health risk increases for people and communities outside of the terminal's immediate area. For example, the increased PM2.5 that is projected from locomotives could create significant issues for communities elsewhere in the state that experience high PM2.5 concentrations during winter inversion events, because the additional emissions loads from locomotives could cause or contribute to exceedances of the NAAQS.

To address these concerns, we recommend that the State's Final EIS air quality analysis at and near the terminal include additional information on modeled maximum impact by source sector. Source sector information would help reviewers better understand the relative contribution of trains and vessels both near the terminal and across the state. We also recommend that the State EIS include additional information on potential air pollution impacts to communities that, for example: have potential for new violations of NAAQS; are in an existing maintenance area; have known diesel particulate matter or air toxics problems; or, are home to sensitive receptors such as low income and minority populations. While the State's DEIS did not include impacts outside of the geographical state boundaries, there is potential that analysis of impacts along the entire rail line may identify similar concerns in other states.

Greenhouse Gas Emissions

The State DEIS provides valuable information to decision makers and the public by estimating the Proposed Action's greenhouse gas emissions, including estimates of the greenhouse gas emissions from the combustion of exported coal. According to the State DEIS, under the Proposed Action, 44 million tons of coal would pass through the proposed terminal at full operation, and combustion emissions from that coal would be approximately 90 million tons of CO₂e per year.

The State DEIS also did a credible economic analysis to estimate the amount of GHG emissions attributable to this project, and modeled four economic and policy scenarios. This kind of analysis is appropriate and important for large projects where the impact on GHG emissions is potentially very significant. The scenarios modeled in the State DEIS produced estimates of GHG emissions attributable to this project as high as 31 million metric tons of CO₂e per year. The State DEIS concludes that the more likely of the scenarios would result in estimated average annual emissions attributable to the project of 2.5 million metric tons of CO₂e.

Given the uncertainties of modeling forecasts and the wide range of outcomes projected from the different scenarios, it is important to provide a full description of methods and to interpret the results within the context of the limitations of the analysis. Given the wide range of results depending on scenarios, we suggest that the State FEIS include further discussion on the factors that underlie this uncertainty, and provide additional information on the specific assumptions and adjustments for each of the scenarios considered in the Coal Market Assessment. Additional information presenting reasons for the specific assumptions and adjustments in each of the scenarios will help to strengthen confidence that the range of results presented in the State EIS encompasses the impacts that are reasonably expected.

The State DEIS suggests that the state would require mitigation of 50% of the average annual greenhouse gas emissions attributable to what the State DEIS concludes is the project's more likely scenario, based on the State's requirements for mitigation of greenhouse gas emissions resulting from electricity generation. As with any mitigation considered in an EIS, the EPA suggests that the State include in the Final EIS what standard the State would use to determine if the mitigation plan is implementable, and how the State expects to ensure that the mitigation is permanent, enforceable, verifiable and additional.

Rail Transportation

The State DEIS indicates that the Proposed Action would contribute to predicted rail capacity exceedances along several rail segments both inside and outside of Washington State. Within Cowlitz

¹ State DEIS, Table 5.8-8

² State DEIS, p. 5.8-22

County, the State DEIS concludes that the trains related to the Proposed Action would lead to a significant adverse impact on the BNSF main line.

The information provided in the State DEIS is helpful. The EPA suggests that additional information would make the analysis more complete, particularly the potential adverse implications of exceeding capacity along rail segments, including impacts on the transportation of passengers and commercial goods, and effects on regional economic activity. In addition, a rail system that is over capacity may need infrastructure improvements that have the potential to cause their own adverse impacts. We suggest that the EIS consider whether likely necessary improvements - for example, adding main track, sidings, expanding yards or grade separation projects - could adversely affect communities or the environment, and what mitigation could be proposed to address any such impacts.

Where the additional information on the implications of rail segment capacity exceedances and necessary infrastructure improvements indicate that there are projected adverse environmental impacts, we suggest that the EIS also evaluate appropriate mitigation. As with all analysis of mitigation, it is useful to include consideration of the likelihood that proposed mitigation would be implemented, and, if implemented, how effective that the mitigation is likely to be in reducing adverse implications for passengers and regional economic activity.

Rail Safety

Due to the increased rail traffic, the State's DEIS predicts that the Proposed Action would lead to a 22% increase in rail accident risk over baseline.³ Rail accidents can be a significant issue, as the Pacific Northwest has recently experienced. The State DEIS highlights the serious concerns that the project could pose for the risk of rail accidents. We note that the potential consequences of catastrophic accidents heighten when the mix of train traffic includes growth trends for oil and passenger trains. The EPA recommends that the Final EIS include additional information on MM RT-2 "Coordinate with BNSF and UP about Operations on Main Line Routes" and provide more information for the public about what strategies would effectively mitigate predicted rail accident increases.

Vehicle Transportation

The State DEIS includes information about potentially substantial vehicle delays that would result from the Proposed Project at several public at-grade crossings along the Reynolds Lead, BNSF Spur, and BNSF main line during peak traffic hours. Such delays cause concern because of adverse effects on accessibility to community resources and public services, including emergency services. Also, such delays may result in increased emissions from idling vehicles, potentially affecting air quality near crossings.

The State DEIS predicts that the Proposed Project will cause substantial adverse impacts on peak hour level of service⁴ and vehicle queue lengths along the Reynolds Lead.⁵ The State DEIS characterizes these impacts as unavoidable, significant and adverse because it is "unknown" when related mitigation (planned track infrastructure upgrades) would be implemented.⁶ The State DEIS also notes that these significant problems would disproportionately affect low income and minority areas. The concern expressed in the State DEIS about the challenges communities often face in funding projects to address

³ State DEIS, p. 5.2-9

⁴ State DEIS, Table 5.3-10

⁵ State DEIS, Table 5.3-12

⁶ State DEIS, p. 5.3-43

freight-related traffic congestion is exacerbated by the fact that the largest impacts would occur in low income communities.

Given the overall concern about vehicle transportation effects in low income and minority areas, and challenges associated with mitigating these effects, we highlight that two of the study crossings with the largest increase in vehicle delay compared to baseline 2028 conditions - Pine Road-SR 27 and Park Road in Spokane County⁷ - are located in a low-income area. We recommend that the State EIS include additional information on whether vehicle delays at these two crossings and any other statewide at-grade crossing would be disproportionate and adverse for low income and minority populations. The State could consider conducting Level of Service, vehicle queue, emergency services and community access analysis for impacted intersections in low income and minority population areas.

Noise

Noise impacts are a concern because, as the State DEIS usefully summarizes, sound is a fundamental component of daily life and high noise levels interfere with a broad range of human activities such as communication and sleep. For the Proposed Action, the State DEIS states that Project-related train horns would lead to the exposure of 60 residences to severe noise impact and 229 residences to moderate noise impacts, and concludes that the impacts would be disproportionately high and adverse on minority and low income populations. We recommend that the Final EIS discuss how that conclusion should be considered in light of the State's policies and approach to advancing environmental justice.

To address noise concerns along the Reynolds Lead, we recommend that the State consider additional mitigation, such as adding an indirect rail noise measure similar to the project area direct noise measure MM NV-1 "Monitor and Control Increased Noise...at Closest Residences." Installing sound insulation in buildings may be appropriate for indirect as well as direct rail noise impacts.

For the statewide analysis of noise, the State DEIS calculates the potential noise impact from Proposed Action related train traffic in terms of average noise levels along six long statewide segments. This averaging approach makes it difficult to determine if train horns at public crossings would lead to moderate or severe impacts - such as those identified along the Reynolds lead. To improve the statewide analysis of train noise, we recommend that the State FEIS include more site-specific analysis of potential noise impacts near at-grade crossings, and evaluate if any such impacts disproportionately affect low income and minority populations.

Tribal Resources

Overall, the State DEIS finds that the Proposed-Action would lead to a 17% increase in train traffic along the BNSF main line adjacent to the Columbia River, and, 38% increase in Columbia River vessel traffic. We suggest that the Final EIS consider how those additional trains and vessels could affect tribal fishers' ability to access fishing locations, and how terminal construction and vessel traffic related to the Proposed Action could indirectly effect tribal resources through physical or behavioral responses of fish, or by affecting habitat. To address tribal resource impacts, we strongly encourage the Co-Lead agencies to continue to actively engage and consult with affected tribes.

⁷ State DEIS, Table 5.3-39

⁸ As identified using the EPA's tool EJScreen

⁹ State DEIS, p. 5.5-25

Thank you for this opportunity to comment and we would look forward to meeting with the Co-Leads to discuss these comments, answer questions, and assist with next steps. If you have any questions, please contact Christine Littleton at (206) 553-1601or by electronic mail at Littleton. Christine @epa.gov.

Sincerely,

R. David Allnutt, Director

Office of Environmental Review and Assessment

Mustin B. Littleton for

cc:

Elaine Placido

Cowlitz County Building and Planning Director



United States Department of the Interior

FISH AND WILDLIFE SERVICE

Washington Fish and Wildlife Office 510 Desmond Dr. SE, Suite 102 Lacey, Washington 98503



JUN 13 2016

In Reply Refer To: 01EWFW00-2016-CPA-0066

Millennium Bulk Terminals – Longview SEPA EIS c/o ICF International ATTN: S. Toteff; E. Placido 710 Second Avenue, Suite 550 Seattle, Washington 98104

Subject: Public Notice and Draft Environmental Impact Statement

Millennium Bulk Terminals Longview Coal Export Terminal

On April 29, 2016, Cowlitz County and the Washington State Department of Ecology (DOE) announced the release of a Draft Environmental Impact Statement (EIS) for the Millennium Bulk Terminals Longview Coal Export Terminal (Millennium Longview Coal Terminal). Millennium Bulk Terminals – Longview, LLC (the Applicant) proposes to construct and operate, for a term of approximately 30 years, a 44 million metric ton per year coal-by-rail marine terminal located on the lower Columbia River near Longview in unincorporated Cowlitz County, Washington. The DOE and Cowlitz County, acting as the Washington State Environmental Policy Act (SEPA) co-leads, have requested comments for the Draft EIS by June 13, 2016.

The U.S. Fish and Wildlife Service (Service) has responsibility for managing or co-managing a variety of federal trust resources, including sensitive species which are listed under the Endangered Species Act of 1973, as amended (16 U.S.C. 1531 et seq.)(ESA), their habitats and designated critical habitat, federal wildlife refuges, and other fish and wildlife trust resources. Within the study area, including the rail and marine vessel transport routes in Washington (which include more than 320 linear miles of the middle and lower Columbia River), these trust resources include the following: 1) bull trout (Salvelinus confluentus, threatened; Coastal and Mid-Columbia Recovery Units), 2) Columbian white-tailed deer (Odocoileus virginianus leucurus, endangered), 3) streaked horned lark (Eremophila alpestris strigata, threatened), 4) designated critical habitat for the bull trout and streaked horned lark, 5) numerous candidate

species and species proposed for listing (e.g., northern wormwood, *Artemisia borealis* var. *wormskioldii*; Washington ground squirrel, *Urocitellus washingtoni*), 6) several National Wildlife Refuges and federally administered fish hatcheries, 7) shorebird, waterfowl, and migratory bird populations (including habitats of great importance to the entire Pacific flyway), and 8) jointly managed Tribal, commercial, and recreational fisheries.

The Service is also committed to implementing the goals, objectives, and policy principles outlined in our Native American Policy (USFWS 2016a) and Secretarial Order 3206 (U.S. Department of the Interior and U.S. Department of Commerce, 1997). The Service shares in the federal government's responsibility for accomplishing greater recognition and protection of treaty-protected resources and rights.

The current proposal includes one operating rail track, eight additional tracks or sidings for storing rail cars, rail car unloading facilities, a stockyard and coal storage area, conveyors and reclaiming facilities, two marine terminal docks, and ship loading facilities. The proposed coal export terminal would receive coal from Colorado, Montana, Utah, and Wyoming via rail shipment (BNSF Railway Company and Union Pacific Railroad). Coal would be loaded and transported by ocean-going vessels via the Columbia River and Pacific Ocean to overseas markets in Asia. The current proposal includes the following (Cowlitz County and DOE 2016; Summary, pp. S-1 through S-8):

- Maximum annual throughput of approximately 44 million metric tons of coal per year.
- At maximum throughput, an average of approximately eight (8) loaded unit trains per day; a maximum of approximately 5,840 one-way unit train trips per year.
- At maximum throughput, at least 2 vessel calls per day (an average of 70 vessel calls per month); a maximum of approximately 1,680 vessel transits per year.

Thank you for the opportunity to review and offer comments for the Draft EIS, and for holding the related public meetings and hearings in Longview, Spokane, and Pasco, Washington. This letter transmits the Service's comments and concerns regarding the current proposal, the Draft EIS, and the unavoidable and significant adverse impacts which have been acknowledged by the SEPA co-leads.

The Service has significant concerns regarding the foreseeable impacts of the Millennium Longview Coal Terminal project. The Service believes that the current proposal would have adverse impacts to fish, wildlife, and tribal trust resources. Content included in the Draft EIS suggests that the Millennium Longview Coal Terminal project would have unavoidable and significant adverse impacts, as defined under SEPA, to Tribal Resources, Social and Community Resources, Water Quality, Rail Safety, Air Quality, and Greenhouse Gas Emissions and Climate Change (Cowlitz County and DOE 2016; Summary, pp. S-10 through S-58). Combined with other impacts from past, present, and reasonably foreseeable future actions, the Millennium Longview Coal Terminal project would have additional, significant and adverse cumulative impacts. The Service believes that the SEPA co-leads should recommend against approval of this proposed facility/project.

Cowlitz County and the DOE received over 200,000 comments for the proposed action during the scoping period. Many of these comments expressed concern for aquatic resources, and the potential for damage to aquatic ecosystems, fisheries, and fishing areas on the Columbia River; damage to human health and natural resources from coal dust and diesel emissions; and, toxic air pollution, greenhouse gas emissions, and resulting damage to the global climate system.

Nine Native American Tribes, Tribal Nations, and tribal organizations provided comments to Cowlitz County, the DOE, and/or the U.S. Army Corps of Engineers (Cowlitz County and DOE 2014; Scoping Summary Report, pp. 4-1 through 4-5): the Coeur D'Alene Tribe, Columbia River Inter-Tribal Fish Commission, Confederated Tribes of the Umatilla Indian Reservation, Confederated Tribes of the Warm Springs Reservation, Cowlitz Indian Tribe, Nez Perce Tribe, Nisqually Indian Tribe, Upper Columbia United Tribes, and the Yakama Nation. All nine of the Native American Tribes, Tribal Nations, and tribal organizations expressed serious concern about foreseeable adverse impacts to treaty-protected resources and rights; most of these tribes and tribal organizations also openly expressed opposition to the proposal (Cowlitz County, DOE, and Corps 2016; Scoping Comments http://www.millenniumbulkeiswa.gov/comment-archive.html).

"The Cowlitz Indian Tribe believes the [proposal] would likely lead to significant impacts to culturally relevant resources ... The Cowlitz Indian Tribe supports resolutions of the Affiliated Tribes of [Northwest] Indians (ATNI resolution # 13-47 and # 12-53) which opposes the transport and export of fossil fuels in the Pacific Northwest ... We have taken an official policy stance opposing the [proposal] ... The proposed project is likely to harm our current efforts [restoring] culturally significant species and [will] place burdens on future restoration efforts ... The Cowlitz Indian Tribe believes that no amount of monetary or other mitigation measures will be able to offset or eliminate the [adverse] environmental impacts" (Cowlitz Indian Tribe 2013).

Tribal Resources and Reserved Treaty Rights – The SEPA co-leads have acknowledged unavoidable and significant adverse impacts to cultural and tribal resources, including exclusion from and/or reduced access to the treaty-protected usual and accustomed places (e.g., fishing and hunting areas) of several treaty tribes. The proposed action would impact treaty-protected resources; fisheries, fish and wildlife, and the habitats and water quality upon which fish and wildlife depend. The proposed action would impact tribal fisheries, limit or curtail access to usual and accustomed areas, and infringe upon the treaty-reserved rights of tribes. Content included in the Draft EIS suggests that the Millennium Longview Coal Terminal project would have unavoidable and significant adverse impacts to tribal resources and reserved treaty rights (Cowlitz County and DOE 2016; Summary, pp. S-16, S-17, S-41). In addition, to date, the Applicant and SEPA co-leads have failed to identify mitigation measures that would meaningfully and adequately avoid these significant impacts. For these reasons, the Service recommends against approval of the Millennium Longview Coal Terminal project.

Social and Community Resources – The Draft EIS assesses and describes foreseeable impacts to social and community resources (Cowlitz County and DOE 2016; Summary, pp. S-12 through S-14, S-32, S-41):

• "Trains [would] affect accessibility to community resources and public services ... because of increasing wait times at grade crossings."

- "Trains ... would increase emergency vehicle delay at rail crossings."
- "The proposed action would have a disproportionately high and adverse effect on minority and low-income populations."

The rail transport corridor includes more than 200 at-grade crossings, including numerous underprotected crossings (USFWS 2016b). Increased rail traffic and resulting disruptions to community resources and access represent significant adverse impacts. To date, the Applicant and SEPA co-leads have failed to identify mitigation measures that would meaningfully and adequately avoid these significant impacts.

Water Quality – The Draft EIS assesses and describes foreseeable impacts to water quality (Cowlitz County and DOE 2016; Summary, pp. S-22 through S-24):

- "Rail operations could release contaminants to water resources ... resulting in the potential for water quality impairment ... Fuel or hazardous materials spills from a vessel incident or a collision or derailment of a train would have [significant, adverse] impacts on water quality ... The magnitude of the potential impact would depend on the location of the spill, the volume of the spill, and weather and tidal conditions."
- "Coal could enter water as either coal dust or as the result of a coal spill ... The potential risk for exposure to toxic chemicals contained in coal would be relatively low as these chemicals tend to be bound in the matrix structure and not quickly or easily leached ... particles would be transported ... over a sufficiently broad area that a measurable increase in concentrations ... would be unlikely."
- "Implementation of the proposed mitigation (Table S-2) ... [including measures to] monitor and reduce coal dust emissions in the project area could reduce impacts on water quality."

The rail transport corridor includes significant known and unknown geologic hazards (e.g., areas with elevated landslide susceptibility). The rail transport corridor includes more than 200 linear miles of heavily trafficked rail located within 1 mile of the middle and lower Columbia River, and crosses or lies in close proximity to more than 500 unique waterbodies, 50 perennial streams and rivers, and more than 100 distinct fish-bearing reaches, river segments, and shoreline types (USFWS 2016b). Spills that occur at these locations are likely to result in significant adverse impacts to the Service's trust resources.

The marine vessel transport corridor extends along more than 104 linear miles of the lower Columbia River. Along the lower Columbia River federal navigation channel, much of the land (more than 27 percent) and shoreline is specifically managed for habitat and biological diversity objectives, and more than 10 federal, state, and private wildlife or natural areas could be affected (including the Service's Julia Butler Hansen and Lewis and Clark National Wildlife Refuges)(USFWS 2016b). According to information included in the Draft EIS, the Millennium Longview Coal Terminal project would cause or result in a 25 to 55 percent increase in deepdraft vessel transits along the lower Columbia River federal navigation channel, with corresponding increased risk of vessel incidents, potential spills, and impacts or damages.

Coal dust includes visible fractions (coal dust or smoke) and invisible fractions. Both contain persistent, toxic pollutants that pose a risk to both human and ecosystem health (e.g., heavy metals, including mercury; polycyclic aromatic hydrocarbons). Smaller coal dust particles, including those present in the invisible fraction, have a comparatively higher surface area, are more likely to travel significant distances before deposition, and are more susceptible to physical and chemical degradation and leaching.

The Service believes that the Millennium Longview Coal Terminal project will cause or result in significant coal dust deposition along the rail transport corridor. We do not agree that the risk of accumulation in soils, sediments, and water is negligible or insignificant. The Service expects that the proposed action will measurably increase toxic pollutant concentrations in soils, sediments, and water, and will very likely result in exposures, potential toxic effects, and impacts to the Service's trust resources.

The Applicant and SEPA co-leads have failed to identify mitigation measures that would adequately avoid these significant impacts. The Applicant and SEPA co-leads have stated, "Coal dust [will] become airborne from rail cars ... [but] the rail cars [will] not be covered" (Cowlitz County and DOE 2016; Coal Dust Fact Sheet). The Applicant and SEPA co-leads have offered no explanation as to why covered rail cars were not considered and adopted as a reasonable measure to avoid and minimize significant adverse impacts to human and ecosystem health. We believe that the proposed mitigation measures, coal pile shaping and topper agents, represent half-measures and do not adequately address these significant impacts.

Rail Safety – The Draft EIS assesses and describes foreseeable impacts to rail safety (Cowlitz County and DOE 2016; Summary, pp. S-30 through S-32, S-42):

- "The proposed action would increase the potential for train accidents ... by approximately 22 percent in Cowlitz County and Washington State."
- "Because the frequency of train traffic on BNSF routes would increase ... the probability of an increase in emergency response time ... would also increase [at all crossings statewide] ... crossings would be blocked more frequently."
- "The proposed action [would] result in a significant adverse environmental impact on rail safety in Cowlitz County and Washington State."

The rail transport corridor includes more than 200 at-grade crossing, including numerous underprotected crossings (USFWS 2016b). Increased rail traffic, resulting disruptions to community resources and access, and increased risk of derailments or other train accidents (e.g., collisions at crossings) represent significant adverse impacts. To date, the Applicant and SEPA co-leads have failed to identify mitigation measures that would meaningfully and adequately avoid these significant impacts.

The Millennium Longview Coal Terminal project would generate significant additional rail traffic. Risk of derailments or other train accidents, and resulting impacts and damages, would be greater at hundreds of known and unknown sites with conditions that already contribute to existing elevated safety risk. Geographic Response Plans have not been established for large

areas of the rail transport corridor, and a survey of first responders in Washington finds that most fire/emergency departments and agencies report inadequate training, materials, and other resources (USFWS 2016b).

On June 3, 2016, a 96-car Union Pacific train carrying Bakken crude oil partially derailed in the town of Mosier, Oregon, in the Columbia River Gorge. Crude was released to the environment, the ensuing fire closed Interstate-84 and a local school, and more than a quarter of the town's population was evacuated (Oregonian 2016a). More than 10,000 gallons of crude reached manholes, was conveyed to the wastewater treatment plant, and ultimately reached Rock Creek and the Columbia River. The town's wastewater treatment plant remained closed several days later and municipal authorities have continued to warn that residents should boil the water they obtain from the public supply (Oregonian 2016a).

The train derailment in Mosier, Oregon, is a tangible example of the significant risks created by new proposals that would put increasing volumes of crude and coal on trains in Washington State and the Columbia River Gorge. These risks have been deemed unacceptable by the vast majority of the affected communities and public interest groups. Yakama Nation tribal members and representatives of the Columbia River Inter-Tribal Fish Commission have described the heightened vulnerability of tribal members and treaty-protected resources and rights (Oregonian 2016b). The cumulative impacts of these new coal- and crude-by-rail proposals put irreplaceable resources at risk of damage, including damage that may never be fully recovered or corrected. For these reasons, the Service recommends against approval of the Millennium Longview Coal Terminal project.

Vessel Transportation – The Draft EIS assesses and describes foreseeable impacts to vessel transportation (Cowlitz County and DOE 2016; Summary, pp. S-32 through S-35, S-42):

- "An increase in vessel traffic [would] increase the risk of vessel-related emergencies, such as fire or vessel allusion."
- "Increased vessel traffic [would] increase the risk of vessel incidents such as allisions, collisions, groundings, and fire ... [Our] analysis estimated that the proposed action [would] increase the frequency of collisions, groundings, and fires by approximately 1.5 incidents per year."
- "If an incident occurred during vessel transportation ... the impacts could be significant, depending on the nature and location of the incident, the weather conditions at the time, and whether any fuel [or cargo] is discharged ... Although the likelihood of a serious incident is very low, there are no mitigation measures that can completely eliminate the possibility of an incident or the resulting impacts."

The Service agrees that some incident scenarios, resulting impacts, and damages are likely to occur over the functional life of the proposed facility (e.g., approximately 30 years). The Service also agrees that large or very large incidents are less likely to occur, but would result in severe impacts and damages to fish, wildlife, and tribal trust resources.

Air Quality (Including Coal Dust) – The Draft EIS assesses and describes foreseeable impacts to air quality (Cowlitz County and DOE 2016; Summary, pp. S-35 through S-37):

- "Statewide, the largest increase in locomotive emissions for any one pollutant would be for carbon monoxide at 38 percent, followed by nitrogen oxides with a 15 percent increase ... For commercial marine vessels, the relative increase would be a maximum increase of 12 percent for [volatile organic] emissions and just under 11 percent for carbon monoxide emissions."
- "During rail transit, wind and air moving over the train [will] blow coal dust off the rail cars and disperse it into the air ... [and to] the ground ... Coal dust would also be generated and dispersed ... during coal stockpiling and handling activities in the project area."
- "There are no federal or state guidelines or standards that identify acceptable levels of [coal] dust deposition ... A reference standard [is] commonly cited, [based] on ... a New Zealand Ministry of Environment study ... This Draft EIS uses [the reference standard] to identify a threshold for nuisance-level dust deposition ... coal dust that affects the aesthetics, look, or cleanliness of surfaces ... not the health of humans [or] the environment."
- "[Our] study found the proposed action would result in coal dust [deposition] ... along the rail lines ... While the average and maximum deposition ... was estimated to [exceed] the nuisance thresholds at [some locations], no state or federal standards apply ... This would be an unavoidable but not significant [(or insignificant)] impact."

Locomotive emissions, including diesel particulate matter, and coal dust could have serious human health implications for affected communities along the rail transport corridor. The Applicant and SEPA co-leads have failed to identify mitigation measures that would adequately avoid these significant adverse impacts. The Applicant and SEPA co-leads have offered no explanation as to why covered rail cars have not been considered and adopted as a reasonable measure to avoid and minimize significant adverse impacts to human and ecosystem health.

Greenhouse Gas Emissions and Climate Change – The Draft EIS assesses and describes foreseeable impacts to greenhouse gas emissions and climate change (Cowlitz County and DOE 2016; Summary, pp. S-37 through S-39, S-43):

- "Greenhouse gas emissions were estimated ... in Cowlitz County, as well as ... outside Cowlitz County, including rail and vessel transportation."
- "Greenhouse gas emissions ... attributable to the proposed action would be driven primarily by coal combustion in Asia and the United States ... Under the preferred 2015 Energy Policy scenario, the change in emissions, or the net annual emissions, from the proposed action in 2028 would be 3.2 million metric tons of CO₂ (equivalent) ... This is equivalent to adding about 672,100 passenger cars on the road each year."

- "The total net emissions for the preferred 2015 Energy Policy scenario from 2018 to 2038 would be 37.6 million metric tons of CO₂ (equivalent) ... The total net emissions are the sum of emissions ... compared to a no-action scenario in which the proposed action would not be not constructed ... This would exceed various thresholds that are proposed in federal and state regulations and guidance."
- "The climate change impacts resulting from this increase ... would persist for a long period of time, beyond the analysis period, and would be considered permanent ... The climate change impacts, while global in nature, would affect Washington State ... Based on these considerations, emissions attributable to ... the proposed action ... are considered adverse and significant."

Greenhouse gas emissions contribute to observed trends toward increasing global average sea temperatures, ocean acidification, and other disruptions of the global climate system. These trends are a threat to ecosystem function, including aquatic food webs. These trends are a threat to important Tribal, commercial, and recreational fisheries, and to all of the Service's fish and wildlife trust resources.

Content included in the Draft EIS indicates that life-cycle greenhouse gas emissions resulting directly and indirectly from the proposed action will exceed 37.6 million metric tons of CO₂. The Applicant and SEPA co-leads have failed to identify mitigation measures that would meaningfully avoid or reduce these significant adverse impacts. For these reasons, the Service recommends against approval of the Millennium Longview Coal Terminal project.

The Service concludes that the Millennium Longview Coal Terminal project is likely to have unavoidable and significant adverse impacts to air, water, and sediment quality. The proposed action would emit, directly, indirectly, and cumulatively, large quantities of greenhouse gases and toxic air pollutants. These emissions could threaten the quality and function of fish and wildlife habitats along the middle and lower Columbia River, and beyond.

Fish and Wildlife – The Draft EIS assesses and describes foreseeable impacts to fish and wildlife (Cowlitz County and DOE 2016; Summary, pp. S-25 through S-28):

- "Increases in vessel traffic [would] increase the risk of fish stranding from vessel wakes."
- "Routine operations ... could result in spills or leaks of hazardous materials from vehicles, trains, or equipment ... Contaminants could affect terrestrial habitat and water quality, thus, degrading aquatic habitat in the Columbia River."

The SEPA co-leads have acknowledged potential direct impacts to fish, wildlife, and their habitats, including those that would result from increased marine vessel traffic (e.g., wake stranding of salmonids). The Applicant and SEPA co-leads have failed to identify mitigation measures that would adequately avoid significant impacts resulting from wake stranding along the marine vessel transport corridor. The Draft EIS also acknowledges that vessels pose a risk of introducing nonnative and invasive species, and that ballast water exchange practices and requirements do not fully mitigate those risks.

Locomotive emissions and coal dust are likely to accumulate in soils, sediments, and water, and may thereby result in measurable indirect impacts and damage to fish and wildlife trust resources. Spills and resulting adverse impacts along the rail and marine vessel transport corridors could result in "take" under the ESA [Sections 3(19) and 9(a)(1)] and/or adversely affect designated critical habitat, including critical habitat which has been designated by the Service for bull trout and by the National Marine Fisheries Service for numerous salmon and steelhead stocks (or Evolutionarily Significant Units).

The Service is aware that communities and a concerned public throughout the study area, including treaty tribes and tribal organizations, have voiced concerns regarding transport safety, security, readiness, response, and inherent vulnerability along the transportation corridors to and from the proposed Millennium Longview Coal Terminal. Cost-benefit analyses prepared in support of coal- and crude-by-rail proposals should acknowledge or consider significant impacts. damages, and costs. Otherwise, these omissions are a significant concern to the Service. The Service believes that failure to account for externalities, including social and environmental impacts and damages, results in findings that are skewed and incomplete.

There is a strong emerging State and regional consensus that coal- and crude-by-rail proposals pose unacceptable risks, and that associated costs and damages may exceed the economic benefits that accrue to local communities and the State. The SEPA co-leads should broaden their consideration of social and environmental factors where possible, and should monetize and provide to the public a thorough and comprehensive accounting of all the foreseeable impacts, costs, and damages that are likely to result from the Millennium Longview Coal Terminal project.

In summary, the Service believes that the Millennium Longview Coal Terminal project would have unavoidable and significant adverse impacts, and would damage fish, wildlife, and tribal trust resources. Therefore, the Service does not support the current proposal. We believe that the SEPA co-leads should recommend against approval of the facility/project.

Thank you for the opportunity to review and offer comments for the Draft EIS. If these comments are unclear, if the SEPA co-leads have related questions, or would like to further discuss this proposal and/or the SEPA process, please contact Ryan McReynolds (Consultation and Conservation Planning Division; Email: ryan mcreynolds@fws.gov).

Sincerely,

Eric V. Rickerson, State Supervisor Washington Fish and Wildlife Office

cc:

DOE, Lacey, WA (S. Toteff, D. Butorac) Cowlitz County, Kelso, WA (E. Placido) USFWS, Portland, OR (N. Dexter, S. Stavrakas)

Sources Cited

- Cowlitz County and the Washington State Department of Ecology (Cowlitz County and DOE). 2016. State Environmental Policy Act Draft Environmental Impact Statement for the Millennium Bulk Terminals Longview Project (April 2016). Available On-Line at http://www.millenniumbulkeiswa.gov; Accessed 6/1/2016.
- Cowlitz County and the Washington State Department of Ecology (Cowlitz County and DOE). 2014. State Environmental Policy Act Draft Environmental Impact Statement, Scoping Summary Report. Appendix J *In* Cowlitz County and the Washington State Department of Ecology (Cowlitz County and DOE). 2016. State Environmental Policy Act Draft Environmental Impact Statement for the Millennium Bulk Terminals Longview Project (April 2016). Available On-Line at < http://www.millenniumbulkeiswa.gov/assets/ mbtl_sepa_deis_appendix-j_scopingsummaryreport.pdf>; Accessed 6/1/2016.
- Cowlitz Indian Tribe. 2013. Letter to Colonel Bruce A. Estok, Seattle District Commander, U.S. Army Corps of Engineers Scoping Comments for Millennium Bulk Terminals Longview, LLC (MBTL) Project NEPA/SEPA Environmental Impact Statement. November 18, 2013. 3pp.
- The Oregonian / Oregon Live. 2016a. Days after oil train derailment, normal seems far away in scenic Mosier. [By Carli Brosseau.] Available On-Line at http://www.oregonlive.com/pacific-northwest-news/index.ssf/2016/06/days_after_oil_train_derailmen.html; Accessed 6/8/2016.
- The Oregonian / Oregon Live. 2016b. Tribes face some of greatest risks from oil train wrecks in Columbia River Gorge, leaders say. [By Molly Harbarger.] Available On-Line at http://www.oregonlive.com/politics/index.ssf/2016/06/tribes_face_some_of_greatest_r.html; Accessed 6/8/2016.
- U.S. Fish and Wildlife Service. 2016a (January 20, 2016). Native American Policy Working with Native American Tribes. 20pp.
- U.S. Fish and Wildlife Service. 2016b. Letter to the State of Washington Energy Facility Site Evaluation Council, Subject: Public Notice and Draft Environmental Impact Statement for the Tesoro Savage Vancouver Energy Distribution Terminal Facility. Washington Fish and Wildlife Office, Lacey, Washington. January 22, 2016. 7pp.
- U.S. Department of the Interior and U.S. Department of Commerce. 1997 (June 5, 1997). Secretarial Order 3206. 14pp.



Forest

Columbia River Gorge National Scenic Area

902 Wasco Avenue Suite 200 Hood River, OR 97031 541-308-1700 FAX: 541-386-1916

1900 File Code:

> Date: June 10, 2016

Elaine Placido, Director, Building and Planning, Cowlitz County Sally Toteff, Director, Southwest Regional Office, Washington State Dept. of Ecology MBTL SEPA Draft EIS c/o ICF International 710 Second Avenue, Suite 550 Seattle, WA 98104

(Submitted Electronically https://public.commentworks.com/cwx/mbtldeiscommentform/)

Dear Ms. Placido and Ms. Toteff,

The USDA Forest Service, Columbia River Gorge National Scenic Area provides these comments on the Draft Environmental Impact Statement (DEIS) for the coal export terminal proposed by Millennium Bulk Terminals – Longview, LLC. The location of the proposed terminal is the site of the former Reynolds Aluminum smelter, on the shore of the Columbia River in Cowlitz County, Washington. Coal would be delivered to the terminal by rail, with loaded 125-car unit trains of coal arriving via the Burlington Northern-Santa-Fe (BNSF) Pasco-Vancouver route along the Washington shore of the Columbia River, and the Union Pacific (UP) rail lines running along the Oregon shore of the Columbia River. If approved and constructed, the terminal would increase rail traffic through the Columbia River Gorge by eight loaded unit trails of coal per day. Empty UP trains may make a return trip through the Gorge. We are concerned about the impacts of project-related increases in rail traffic through the Gorge.

The Columbia River Gorge National Scenic Area (CRGNSA) was created in 1986 by an act of the U.S. Congress. The purposes of the Act are: (1) to establish a national scenic area to protect and provide for the enhancement of the scenic, cultural, recreational, and natural resources of the Columbia River Gorge; and (2) to protect and support the economy of the Columbia River Gorge area by encouraging growth to occur in existing urban areas and by allowing future economic development in a manner that is consistent with paragraph (1) (Pub. L. 99-663, Sec. 3, Nov. 17, 1986, 100 Stat. 4276). In establishing the National Scenic Area, Congress recognized the national significance of the unique values and resources in the Columbia Gorge, and designated them for long-term protection and enhancement. Given the importance of this unique context, it is essential that the Millennium proposal be fully evaluated for impacts to the resources and economies the Scenic Area Act is intended to protect.

The CRGNSA runs along both the Washington and Oregon sides of the Columbia River, spanning approximately 85 miles from Washougal to Wishram in Washington, and Troutdale to The Dalles in Oregon. The CRGNSA encompasses 292,500 acres, and contains thirteen designated urban areas and numerous other communities. Land ownership is mixed, and includes





federal, state, county, tribal, private and other interests. Land use is also mixed, with an overall rural character. Development and population centers occur primarily along the river corridor. Recreation, tourism, forestry, and local agriculture are important components of the gorge economy.

The CRGNSA is an international tourist and recreation destination, renowned for its scenic beauty; its wide diversity of intact natural habitats; plant and animal species, including ESA-listed salmon; and its rich cultural history. Millions of visitors - local, national, and international - visit the CRGNSA every year. The National Scenic Area Act assigned the U.S. Forest Service and the Columbia River Gorge Commission responsibility for management of lands and resources within the Scenic Area. The U.S. Forest Service is concerned about the project's potential impacts to the scenic, natural, cultural, and recreational resources in the Gorge; to the economies of Gorge communities; and to the treaty rights of the Columbia River Treaty Tribes.

In November of 2013 our office submitted a comment letter during the scoping period for the Millennium Bulk Terminal project. We requested that the DEIS take into consideration the potential impacts of the proposal on the Columbia River Gorge National Scenic Area, particularly those impacts associated with the project-related increase in train traffic through the Gorge. Among our concerns were the potential for an increase in rail-related fire starts and resultant wildfires; impacts to air and water quality; the establishment and spread of new populations of invasive species; and noise impacts associated with increased rail traffic. While the DEIS does generally consider some of these topics, nowhere does it specifically address the project's potential effects within the uniquely sensitive context of the CRGNSA.

The Columbia River Gorge is a major regional transportation corridor for river, motor vehicle, and railroad traffic. On the Washington side of the Columbia River, the Burlington Northern-Santa Fe (BNSF) rail line runs the length of the Scenic Area, paralleling both State Route 14 (SR 14) and the Columbia River shoreline. On the Oregon side, the Union Pacific Railroad (UPRR) line runs parallel to Interstate Highway 84 (I-84) and the river shore. On both sides of the Columbia, this is a narrow transportation corridor. On the Washington side, it is tightly geographically constrained by the Columbia River to the south, and by steep hills and cliffs to the north. Transportation, communities, and recreational activities are concentrated along the river corridor. The BNSF and UPRR rail lines pass directly through the gorge's major population centers, tourist attractions, and recreation areas. In addition, both UPRR and BNSF rail lines are immediately adjacent to the Columbia River in most places, and cross many major and minor tributaries.

Given the nature of this corridor, any rail incident involving a spill, fire, or explosion is likely to have notable detrimental impacts to Gorge resources, communities, public safety, and to the overall economy of the gorge. Current preparedness levels across the entire rail corridor are not adequate for response to any other than a very small incident. Emergency response within the Scenic Area corridor is logistically extremely challenging. In addition to the lack of local response capacity, limited road access from the north and south and the likelihood that an incident along either the UPRR or the BNSF line would block and cause closures, backups and delays on I-84 or SR 14 or both would further hinder response and evacuation efforts. Depending on the type and scale of the incident itself, the emergency response and subsequent clean-up activities also have the potential to significantly impact treaty rights, damage or destroy irreplaceable cultural and historic resources, and adversely impact natural resources.

The gorge is well known for its strong prevailing winds. Increased rail traffic would require increased routine rail maintenance, including rail grinding and other activities that produce sparks. This increase in rail maintenance carries with it the potential for increased fire starts within the Scenic Area and across the length of the rail corridor. Any rail incident involving fire is likely to be immediately compounded by the strong winds that blow almost consistently through the gorge, and which could cause fire to spread rapidly from its point of origin. The June 3, 2016 derailment of a UPRR unit train carrying Baaken crude oil provided an important wake-up call about the potential for a disastrous rail-related incident in the Gorge. Had the typical winds been blowing that day, the fire associated with that incident would have quickly become a potentially catastrophic wildfire.

Setting aside the impacts associated with a spill, fire, explosion or other rail incident, the DEIS analysis of impacts associated with an increase in rail traffic through the Gorge does not assess the potential for impacts to the CRGNSA's unique scenic, natural, recreational and cultural resources, or the potential economic effects to gorge communities. Rail traffic can block or hinder access to popular recreation sites. It can be a deterrent to recreation and tourism-related economic activity. Rail traffic blocks scenic views of the Columbia River and the Oregon side of the Gorge from the SR 14 corridor in Washington. The DEIS acknowledges that the increase in rail traffic associated with the proposed action would exceed the capacity of the current BNSF rail infrastructure in Washington State. What additional rail infrastructure would be needed in the foreseeable future were the proposed Millennium terminal to be approved and become fully operational? How do the social and environmental effects of the proposed increase in Millennium-related rail traffic through the CRGNSA interact cumulatively with other current proposals for increased terminal capacity along the same rail lines – for instance, the proposed Tesoro-Savage petroleum terminal in Vancouver, Washington that is currently under analysis?

We request that the final DEIS for the Millennium Bulk Terminals – Longview proposal include an analysis specific to the potential impacts of the project to the resources, communities, and economy of the Columbia River Gorge National Scenic Area. The Scenic Area is unique as a congressionally designated area with a high concentration of important and sensitive scenic, natural, cultural and recreational resources and a local economy that is closely tied in with the protection and enhancement of those resources.

We urge the agencies responsible for developing this analysis to utilize information sources specific to the Gorge, to inform the analysis. Examples include Dr. Dan Jaffe's studies of coal dust deposition in the Gorge (http://www.atmos.washington.edu/jaffegroup/modules/APOLLO/), information available from the Columbia River Inter-Tribal Fish Commission (http://www.critfc.org), and Gorge-specific information from state and federal agencies involved in land and resource management in the Columbia River Gorge. Please feel free to contact my staff for additional information. Your point of contact for the USFS-CRGNSA is Natural Resource and Planning Staff Officer Robin Shoal, who can be reached at 541-308-1716, or rshoal@fs.fed.us.

Sincerely,

Miki Jujikana

for LYNN BURDITT

Area Manager



United States Department of the Interior

NATIONAL PARK SERVICE

NATIONAL PARK SERVICE Pacific West Region 909 1st Avenue, Suite 500 Seattle, WA 98104

IN REPLY REFER TO:

1.A.2. (PWRO-NR)

June 9, 2016

Millennium Bulk Terminals EIS c/o ICF International 710 Second Street, Suite 550 Seattle, WA 98104

To Co-Lead Agency Representatives:

National Park Service (NPS) staff has reviewed the April 29, 2016, Draft Environmental Impact Statement (DEIS) for the Millennium Bulk Terminals – Longview (MBTL) coal export project proposed along the Columbia River in Cowlitz County, Washington. The project would involve a maximum annual throughput capacity of up to 44 million metric tons of coal per year. Coal from the Powder River Basin in Montana and Wyoming, and the Uinta Basin in Utah and Colorado, would be transported to the terminal by train. At full terminal operations, approximately eight loaded unit trains each day would carry coal to the terminal, approximately eight empty unit trains each day would leave the terminal, and an average of 70 vessels per month or 840 vessels per year would be loaded with coal for export, which would equate to 1,680 vessel transits in the Columbia River annually.

While MBTL could affect several areas managed or administered by the NPS, our review of the DEIS focused on potential impacts on the three parks that would be most directly influenced by coal transport: Glacier National Park in Montana; Fort Vancouver National Historic Site in Vancouver, Washington; and Lewis and Clark National Historical Park near Astoria, Oregon. Given that our August 21 and November 13, 2013, submittals to the U.S. Army Corps of Engineers during project scoping recommended impact analyses for these areas, we are disappointed they were not addressed in the MBTL DEIS. As discussed in detail in the enclosure, we recommend the Final EIS include a robust analysis of potential project impacts on the three NPS areas.

We are pleased that MBTL is proposing to offset 50 percent of the net operational greenhouse gas (GHG) emissions identified in their 2015 Policy Scenario (page 5.8-22). However, Appendix 2 of Washington's 2010 Climate Change Comprehensive Plan states "maintaining emissions at current levels means we are not on track to meet the state's statutory GHG reduction limit for 2020, and must continue to look for additional opportunities to increase energy efficiency, promote renewable energy, and otherwise reduce our GHG emissions." Therefore,

requiring MBTL to offset all project GHG emissions, including those from both operations and transport, would support the goals of the state's 2010 Plan.

Please contact Tonnie Cumming at 360-816-6201 or <u>Tonnie Cummings@nps.gov</u> for further information or if you have any questions regarding our comments.

Sincerely,

Palmer L. Jenkins

Deputy Regional Director, Pacific West Region

Enclosure: National Park Service (NPS) Detailed Comments on the Millennium Bulk Terminals – Longview (MBTL) April 29, 2016, Draft Environmental Impact Statement (DEIS)

CC:

Tracy Fortmann, Superintendent, Fort Vancouver National Historic Site,
Jeff Mow, Superintendent Glacier National Park
Mark Biel Natural Resources Program Manager, Glacier National Park
David Hurd, Environment Protection Specialist, Intermountain Regional Office:
Melissa Trenchick Chief of Environmental Quality, Intermountain Regional Office:
Chris Clatterbuck, Acting Superintendent, Lewis and Clark National Historical Park
Tonnie Cummings Regional Air Resources Specialist, Pacific West Regional Office
Dave Louter, Chief Cultural Resources, Pacific West Regional Office
Doug Wilson, Archeologist, Pacific West Regional Office

National Park Service (NPS) Detailed Comments on the Millennium Bulk Terminals – Longview (MBTL) April 29, 2016, Draft Environmental Impact Statement (DEIS)

Fort Vancouver National Historic Site (NHS)

Fort Vancouver NHS encompasses 209 acres and contains numerous cultural resources associated with American Indians, the Hudson's Bay Company colonial establishment, and the first U.S. Army post in the Pacific Northwest. There are numerous archaeological resources associated with Fort Vancouver NHS including the Fort Vancouver Village ("Kanaka" Village), the pond and Waterfront Complex, and underwater sites within the Columbia River (the Quartermaster East and Benoit sites). The entire area is a listed National Register District. Today, over one million visitors come to the park and its affiliated sites each year to learn more about the history of the Pacific Northwest.

The Burlington Northern Santa Fe (BNSF) railroad runs through Fort Vancouver NHS and a portion of the lines are on an easement that dates back to 1906 when the original Spokane, Portland, and Seattle (SP&S) Line was built across the U.S. Army post. The Final Environmental Impact Statement (FEIS) should evaluate the impacts of increased rail traffic due to MBTL, which could have direct and indirect effects on the historic properties of Fort Vancouver NHS. Increased rail traffic may increase the risk of a derailment that could damage irreplaceable cultural resources, and could pose hazards to visitors enjoying the site. For example, some of the areas immediately adjacent to the railroad contain highly sensitive and significant subsurface archaeological resources associated with the colonial period of the Pacific Northwest. A derailment in these areas could directly damage or destroy these resources. Similarly, we assume the coal dust that would accumulate on and adjacent to the tracks would have to be removed regularly; the FEIS should discuss how coal dust removal could affect subsurface archaeological resources adjacent to the tracks. Finally, we recommend the FEIS evaluate the impact of increased vibration associated with more frequent train passage on archaeological resources of the park.

The FEIS should evaluate the increased frequency of visual and audible impacts from rail traffic on visitor experience at Fort Vancouver NHS. We are concerned that the increased rail traffic due to MBTL could diminish the ability of visitors (including American Indians and Native Hawaiians) to make connections to the historic properties of the district, including in particular, aspects of feeling and setting. Views from inside and adjacent to the Fort, Village, and Waterfront Complex may be disrupted, affecting the ability of the visitor to orient to the historical context of the site. Some of these sites may have a special significance to American Indian tribes.

Glacier National Park (NP)

Glacier NP preserves more than a million acres of forests, alpine meadows, lakes, rugged peaks, and glacial-carved valleys in the Northern Rocky Mountains. Its diverse habitats are home to nearly 70 species of mammals including the grizzly bear, wolverine, gray wolf, and lynx. Over 270 species of birds visit or reside in the park, including such varied species as harlequin ducks, dippers, and golden eagles. The park is named for its prominent glacier-carved terrain and

remnant glaciers descended from the ice ages of 10,000 years past. Bedrock and deposited materials exposed by receding glaciers tell a story of ancient seas, geologic faults and uplifting, and the movement of giant slabs of the earth's ancient crust overlaying younger strata. The result of these combined forces is some of the most spectacular scenery on the planet.

The BNSF railroad runs adjacent to, and at times forms the southern boundary of, Glacier NP. The rail line borders Bear Creek and the Middle Fork Flathead River, a designated wild and scenic river that is world-renowned for whitewater rafting and fishing. The railroad also crosses several park streams and well-established avalanche chutes. We are concerned about potential impacts from coal dust and train derailments on gateway communities, as well as on park water quality and aquatic life--specifically the federally-threatened bull trout (Salvelinus confluentus) and the westslope cutthroat trout (Oncorhynchus clarkii lewisi), a state species of concern. When available, results of the U.S. Geological Survey study mentioned on page 5.7-5 of the DEIS should be used to assess the impacts of coal dust exposure on aquatic resources at Glacier NP.

The 1977 Clean Air Act amendments have requirements to protect air quality in 156 mandatory Class I national parks and wilderness areas, including Glacier NP. The Clean Air Act also directs the NPS to protect air pollution-sensitive resources such as visibility, streams, lakes, vegetation, soils, and wildlife in Class I areas. The FEIS should assess the impact of coal dust and train emissions associated with MBTL on air quality in Glacier NP.

Visitor and employee safety is of interest at Glacier NP because several high use and developed areas are adjacent to the railroad tracks and more rail traffic increases the likelihood of derailments. In addition, research has shown the current traffic level of about 30 trains per day affects wildlife movement and survival. For example, from 1998-2011, thirty-one out of 290 (11%) confirmed deaths of threatened grizzly bears in the Northern Continental Divide Ecosystem (NCDE) of Montana were due to collisions with trains. Train collisions represent the fourth most common form of human-caused mortality in the NCDE grizzly bear population (US Fish and Wildlife Service, 2013). Increased rail traffic could further restrict wildlife movement and increase mortality in and near the park. The FEIS should assess the impacts on Glacier NP of increased rail traffic associated with MBTL.

Lewis and Clark National Historical Park (NHP)

Originally established as Fort Clatsop National Memorial, Congress in 2005 expanded and redesignated the park as Lewis and Clark NHP "in order to preserve for the benefit of the people of the United States the historic, cultural, scenic, and natural resources associated with the arrival of the Lewis and Clark Expedition in the lower Columbia River area, and for the purpose of commemorating the culmination and the winter encampment of the Lewis and Clark Expedition ..." (Public Law 108-387). Today, the park is comprised of seven units totaling approximately 3,400 acres in Pacific County, Washington and Clatsop County, Oregon.

Six of the units of Lewis and Clark NHP are along the shoreline of the lower Columbia River Estuary or nearby along the coast of the Pacific Ocean. As a result, the park could be impacted by the estimated 1,680 vessel transits in the Columbia River per year; this would represent a 38% increase from the projected 4,440 transits of other cargo vessels estimated for the year 2028

(page 5.4-39). This increase in vessel traffic will lead to an increase in total incident frequency and an increase in the risk of oil spills (page 5.4-43). To that end, we suggest the FEIS say "Increased vessel transport could also affect the Lewis and Clark National Historic Trail and Lewis and Clark National Historical Park ... " [pages S-16 and 3.4-16]. If oil or cargo spills occur near the units of Lewis and Clark NHP, the park's natural and cultural resources could be affected. The extent of the adverse impact would depend on tides, weather, and the emergency response.

We appreciate that MBTL recognizes the potential for oil spills from vessels underway and incorporated those analyses and impacts into the DEIS. However, the analysis of oil spills in the Columbia River is confined to a narrow timeframe: 2004 - 2014 (page 5.4-44). Because large oil spills have long incident recurrence intervals, we recommend that the timeframe of analysis be extended. For example, the November 24, 2015, DEIS for the Tesoro Savage Vancouver Energy Project included a historical timeframe of 1990 to 2011; as a result, the DEIS reported the expected interval of a spill over 1,000 billion barrels due to a vessel grounding or collisions to be 34 years. Extending the baseline period further to 1984 would allow the analysis to include the grounding of the *Mobil Oil* near Warrior Rock in the Columbia River that spilled 200,000 gallons of heavy oil.

Lewis and Clark NHP could also be affected by coal dust from vessel transport. While there are two mitigation methods outlined for minimizing coal dust near the terminal and from rail cars (pages S-56 and S-57), no similar mitigation is discussed for vessels. We recommend the MBTL FEIS include coal dust mitigation measures for vessel transport.